## Air-conditioning and Refrigeration Technician

## **Job Description**

- Installation of HVAC and Refrigeration units, including electronic and mechanical components
- Installation of HVAC ductwork including flexible tubing and sheet metal construction
- Troubleshoot and repair HVAC units including electronic and mechanical components
- Install or repair electrical connections to HVAC components
- Install, inspect, maintain, modify, and repair a wide variety of heating, ventilating, refrigeration, and air conditioning systems, equipment, and controls
- Diagnose electronic, electro-mechanical, electrical, and mechanical malfunctions
- Make complex emergency repairs
- Read, interpret, and work from blueprints, drawings, schematics, diagrams, sketches, and specifications
- Learn characteristics of new systems and equipment of the heating and air conditioning trade and update skills to adapt to changing technology
- Follow oral and written instructions
- Work effectively and cooperatively with other personnel
- Keep accurate records
- Inspects, maintains, repairs and modifies hot water, high and low-pressure steam, and direct gas-fired heating, chilled water and direct expansion refrigeration and air conditioning, and ventilating systems, equipment, and controls, including pilots,
- Installs heating, ventilating, refrigeration, and air conditioning systems, equipment, and controls on new construction, alteration, improvement and rehabilitation projects.
- Read meters and gauges and records data such as temperature of equipment, hours of operation, fuel consumption, and temperature and analysis of fuel gases relays, coils, heating and condensate piping, controls, valves, compressors, fans, dampers, vents, blowers, pumps, burners, gauges, and traps.
- Calibrates and adjusts thermostats, valves, and controls to specified levels of operation.
- Reviews plans, blueprints, and specifications for heating and air conditioning projects to understand scope of projects and to recommend potential changes to supervisor.
- Answers trouble calls for emergency repairs to heating units, refrigeration, and air conditioning equipment.
- Maintains heating and air conditioning hand and power tools and equipment to ensure their safe and efficient operation
- May assist in preparing material lists, estimating job costs, preparing job records, and maintaining an inventory of supplies and tools for assigned area/projects.
- May assist in planning and developing modifications to existing heating and air conditioning systems.
- May assign, review the work of, and provide training to personnel assigned to the unit in heating and air conditioning work.
- Effectively use test equipment Duties include performing skilled work in several of the mechanical or building trades which may include work in the mechanical, and electrical, trades
- Repairs and maintains testing equipment and instruments.
- Performs related work as required
- Considerable knowledge of the tools, equipment, materials, methods, and practices of several of the mechanical or related trades.
- Considerable knowledge of the hazards and safety precautions of the trades.
- Ability to locate and identify malfunctions or defections in equipment or apparatus and to make repairs.
- Ability to plan and supervise the work and instruct subordinate technicians and subordinates.
- Ability to establish and maintain effective working relationships with client and maintenance personnel
- Check equipment and operating systems and correct wherever necessary.
- Ensure mechanical operations, standards and controls are maintained at high quality.

- Ensure high level technical support to lower level technicians
- Show expertise in working with team and independently.
- · Comply with company safety guidelines and procedures.
- Repair and perform preventive maintenance as per established standards.
- Use hand tools like power tools and rigging equipment daily.
- Weld using cutting torch.
- Handle simple and complex heavy industrial equipment
- Comply with company and customer regulations and policies.
- Handle personal tools for job including up-to-date documented personal tool lists.
- Handle time accounting ad complete work order.
- Work all shifts flexibly when job demands

## **Qualifications and experience**

- Tertiary qualification, e,g N5, Diploma in HVAC and Refrigeration, certificates with Acra
- 3-5 years' experience in HVAC and Refrigeration
- Knowledge of Chillers, cooling towers and VRV's
- Computer literate
- Drivers licence